



FEB 19 2010

Reply to Attn of: Office of the Chief Information Officer

Charles M. Allen

Dear Mr. Allen:

Thank you for your email dated August 15, 2009, filing a Request for Correction (RFC) to the NASA Global Climate Change website¹. NASA's Jet Propulsion Laboratory (JPL) manages the website which was developed in 2008, by a JPL team of communication professionals, with the involvement and oversight of NASA climatologists. The site is devoted to educating the public about Earth's changing climate, including its causes and effects, and the methods and instruments NASA uses to study it.

Your initial and follow-up correspondence requested corrections to multiple sections of the NASA Global Climate Change website. NASA considered your requests for correction and conducted a review of the information in question using the NASA Guidelines for Ensuring the Quality of Information². To address your concerns, the table below describes NASA's response to each of your issues. Where changes have been made, the details of the modifications are also provided.

Date	Section	Complainant Request for Correction	Complainant Rationale	NASA Action
8/15/09	Sea Level	Data should more accurately reflect the linked source data. To show the level of variations in the readings, it would be useful to show the actual data points and the 60 day smoothed plot, as well as a long term trend line.	Recommend NASA use the graph on the University of Colorado website as is, reformatted for size.	Graph has been changed to a version provided by Aviso, a sea level data processing service used by the scientific community. The data presented now match the linked source.
8/15/09	Sea Level	Section stated "Last updated 07.51.09".	Change the last updated to a valid date.	Date was corrected to a valid date.
8/15/09	Historical Sea Level	Caption states "Line represents 3 year average, based on 23 annual tide gauge records".	Please provide a reference to the data.	A reference and link to the source of this plot has been added.
8/15/09	Historical Sea Level	Smoothed plotted line of Global Annual Temperatures appears to be in error. It differs from the graph on the homepage of the CRU.	Identify the method of smoothing used and how the data is extended into the future so that the smoothing plot can be extended to 2008.	This plot will no longer be featured on the website and has been removed.

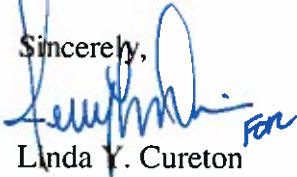
¹ NASA Global Climate Change website: <http://climate.nasa.gov>

² NASA Guidelines for Ensuring Quality of Information website:
http://www.sti.nasa.gov/FINAL_NASA_guidelines.pdf

Date	Section	Complainant Request for Correction	Complainant Rationale	NASA Action
8/15/09	Global Average Temperature	Data used for the Global Average Temperature plot is based upon confidential raw data that cannot be released to outside parties for an independent verification, audit, and replication of the value-added HADCRUT3 temperature product.	NASA should either include a statement that this data is non-verifiable; or NASA in conjunction with other US government agencies should perform a proper due diligence review of the quality, transparency, reproducibility, and validity of this highly influential scientific product widely used throughout the US government in making important public policy decisions such as the "Cap and Trade" law.	The Climate Research Unit (CRU) plot is one of three major constructions, all broadly consistent, that show Earth's climate has warmed since 1880. In the interest of not appearing to endorse one external construction over others, NASA will reproduce only the agency-sponsored GISS plot on the "Key Indicators" page, while providing links to the plots developed by CRU and the National Oceanic and Atmospheric Administration.
8/15/09	Historical Sea Level	The plotted data does not appear to correspond to the graph caption of "Rate of Change 2mm per year".	(1) It would be helpful to draw a 2mm/year trend line on this chart; (2) It would be helpful to have the vertical axis labeled in mm rather than cm.	(1) The original data plot is no longer published on the website. Instead, the website displays a more recent version of this data plot, published by the Commonwealth Scientific and Industrial Research Organisation (CSIRO). The plot now matches the linked source data, which provides background on methodology. In the interest of consistency with the source data, the trend line is omitted. (2) The vertical axis is now labeled in mm, as requested.
8/15/09	Ice Mass	The left-hand graph is a picture of Greenland with a key below showing "annual days of melt". None of the sources listed in this section lead to further information on the graph or its meaning.	(1) Request that this graph either be deleted, or that additional information be provided such that the annual days of melt is presented in historical context; (2) Request that a source for the data and further information be provided.	(1) Graph changed to a plot of Arctic Sea Ice trend, which requires less narrative detail to explain. (2) Link to the source of the new plot and further information is provided.
8/15/09	Global Average Temperature	Either this graph has been updated since the indicated data of 5.19.08, or it does not have the correct data for the annual average of 2008.	Please correct.	Date stamp has been updated.
8/15/09	Global Average Temperature	The UK Meteorology Office has this same data series with a plot which is much better documented.	Recommend using the graphical method shown at http://hadobs.metoffice.com/hadcrut3/diagnostics/comparison.html and using that as the source reference since it clearly defines how the data is plotted.	A link to this information has been added.
8/15/09	Global Average Temperature	HADCRUT3 data from University of East Anglia Climate Research Unit has been prepared in ways that are neither transparent nor reproducible.	Request NASA, either separately or in conjunction with other US government agencies, perform due diligence review, verification, replication, and peer review of historical global average temperature data.	This plot has been removed from the website.
8/15/09	Ocean Heat Content	A key climate indicator is the metric Ocean Heat Content.	Request webpage include a historical and recent Ocean Heat Content graph.	Suggestion will be considered for future enhancements.
8/24/09	Ice Mass	Update Ice Mass graphic to show the Ice extent as of March 2009 is 5.85 million square MILES, instead of 5.85 million square KILOMETERS.		This was an error in labeling that has been corrected..
8/24/09	Ice Mass	Change "last update date" when making changes. Ice Mass graphic shows 3.12.09 as the last update, even though it was modified last week.		The date stamp is intended to indicate that last date a new data point was added to the plot. To clarify this, the label has been changed from "Last update date ____" to "Data updated ____".
8/24/09	Ice Mass	Climate.nasa.gov states "Arctic Sea Ice -38% per decade". To which sea ice metric does this -38% per decade apply?		This statement has been removed from the current website.

Once again, thank you for your concern regarding the quality of information disseminated by NASA. You may appeal NASA's response to this Request for Correction within 30 business days as described in the aforementioned NASA Guidelines for Ensuring the Quality of Information, Section D.2. If you have additional questions or concerns, please contact Lori Parker, Office of the Chief Information Officer at (202) 358-1351 or lori.parker-1@nasa.gov.

Sincerely,



Linda Y. Cureton
Chief Information Officer